

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-4. Cancelled

5. (Previously Presented) The system according to claim 45, in which said optical element comprises a transmitting element.

6. (Previously Presented) The system according to claim 5, in which said transmitting element comprises a lens.

7-12. Cancelled

13. (Previously Presented) The system according to claim 45, in which said optical element comprises a mirror.

14-16. Cancelled

17. (Currently Amended) The system according to claim 45, ~~having~~ wherein the system has a slit-shaped image field.

18-20. Cancelled

21. (Previously Presented) The system according to claim 45, in which said optical element is arranged near a field plane.

22-24. Cancelled

25. (Currently Amended) The system according to claim 45, further comprising a reticle, wherein during operation of the system the reticle is illuminated with illumination of which lacks rotational symmetry.

26 (Currently Amended) The system according to claim 25, in which said reticle illumination is ~~consists of~~ off-axis, dipole or quadrupole illumination.

27-30. Cancelled

31. (Currently Amended) The system according to claim 45, in which said optical element is arranged near a pupil plane.

32-34. Cancelled

35. (Currently Amended) The system according to claim 45, in which said ~~passive~~ heat conducting device comprises a ~~devices-comprise~~ connecting structure that comprises portions of different materials.

36-38. Cancelled

39. (Currently Amended) The system according to claim 45, in which said ~~passive~~ heat conducting device comprises a ~~devices-comprise~~ connecting structure that comprises adjustable portions.

40. (Currently Amended) The system according to claim 45, in which said ~~passive~~ heat conducting device comprises ~~devices comprise~~ a thermally conducting element is adjustable.

41. (Currently Amended) The ~~projection exposure~~ system according to claim 40, in which said thermally conducting element comprises ~~elements comprise~~ adjustable portions.

42-44. Cancelled

45. (Currently Amended) A microlithography ~~projection exposure~~ system, comprising:

having a light source; and
an optical element; and
a heat conducting device comprising webs of different cross section, or fingers of different width, different shape, different thickness, or different materials,

wherein during operation of the system the optical element which is heated by radiation from the light source in a non-rotationally symmetric fashion, ~~and having non-rotationally symmetric cooling of the optical element, the cooling being effected by passive heat conducting devices, characterized in that the passive heat conducting devices comprise webs of different cross-section, or fingers of different width, shape or thickness, or of different material, and the optical element is cooled by the heat conducting device~~ such that an at least partial homogenization of the temperature distribution in the optical element is effected,
wherein the system is a microlithography projection exposure system.

46. (Currently Amended) The ~~microlithography projection exposure~~ system according to claim 45, in which the optical element is fastened in a mount, the heat conducting

device is provided between the optical element and the mount as a connecting structure which exhibits a symmetry not corresponding to the shape of the optical element, and

wherein during operation of the system radiation is applied to the optical element in such a way that heat is fed in a fashion exhibiting no symmetry corresponding to the shape of the optical element, and ~~the said passive heat conducting device is provided between the optical element and the mount as a connecting structure which exhibits a symmetry not corresponding to the shape of the optical element~~ the optical element is cooled by the heat conducting device in such a way that the at least partial homogenization of the temperature distribution in the optical element is effected.

47. (Currently Amended) The ~~microlithography projection exposure~~ system according to claim 45, in which the optical element is fastened in a mount, the heat conducting device is a unipartite or multipartite heat conducting element and is connected to the optical element and the mount, and

wherein during operation of the system radiation is applied to the optical element in such a way that heat is fed in a fashion exhibiting no symmetry corresponding to the shape of the optical element and ~~the said passive heat conducting device is designed as a unipartite or multipartite heat conducting element and is arranged to be operationally connected to the optical element and the mount~~ the optical element is cooled by the heat conducting device such that a form of heat transport results which effects an at least partial compensation of the asymmetry of the temperature distribution in the optical element.

48. (Currently Amended) The ~~microlithography projection exposure~~ system according to claim 45, further characterized in that at least one part of the heat conducting device is in thermal contact with the optical element, covers a part of the cross section of the optical element not touched by the radiation during operation of the system, and reduces temperature gradients in the optical element during operation of the system.

49. (Currently Amended) The ~~projection-exposure~~ system according to claim 46, further characterized in that the connecting structure is constructed from parts formed from ~~which consist of~~ different materials.

50. (Currently Amended) The ~~projection-exposure~~ system according to claim 47, further characterized in that the heat conducting element comprises ~~is assembled from~~ parts made from different materials ~~material~~.

51. (Currently Amended) The ~~projection-exposure~~ system according to claim 48, further characterized in that the part or parts in thermal contact comprise ~~consist of~~ a number of different materials.

52. (Currently Amended) The ~~projection-exposure~~ system according to claim 46, further characterized in that the connecting structure has adjustable parts.

53. (Currently Amended) The ~~projection-exposure~~ system according to claim 47, further characterized in that the heat conducting element is adjustable.

54. (Currently Amended) The ~~projection-exposure~~ system according to claim 48, further characterized in that the part or parts in thermal contact are at least partially adjustable.